What is claimed is:

1. A database system, for storing and managing data that are used by application programs to execute a specific operation, comprising:

5   a hierarchical node database wherein data used for said application programs are stored as node data in data records; and

    a hierarchical link table, provided for each of said application programs, wherein relationship data, which

10 define the hierarchical structure of said node data that are stored in said hierarchical node database, are stored as data entries in said data records.

2. The database system according to claim 1, wherein, in said hierarchical link table, effective period data that

15 define effective periods for said data records are stored as data entries in said data records.

3. The database system according to claim 2, wherein, in said hierarchical node database, said effective period data that define said effective periods for said data

20 records are stored as data entries in individual data fields.

4. The database system according to claim 3, wherein each of said data records in said hierarchical node database includes a fixed-length column in which only data

25 entries having a constant size are stored, and a

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variable-length column in which only data having variable sizes are stored.

5. The database system according to claim 4, further comprising a cycle control table in which cycle data are
5   entered to define execution timings for said application programs that execute operations at constant time intervals.

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